

What is claimed is:

1 1. Anelectronicmail(e-mail) systemthat has: a first
2 information terminal (70) for transmitting and receiving
3 sound information and text information; a second information
4 terminal (40) for transmitting and receiving sound
5 information and text information in different ways; and a
6 managing apparatus (10a, 10b, 10c, 10d, 10e, 10f, 10g, 10h,
7 10i, 10j, 10k, 10l, 10m, 10n), communicably interconnected
8 between said first information terminal (70) and said second
9 information terminal (40), for managing an e-mail message
10 that includes at least text information to be transmitted
11 and received between said first information terminal (70)
12 and said second information terminal (40),
13 said managing apparatus (10a, 10b, 10c, 10d, 10e, 10f,
14 10g, 10h, 10i, 10j, 10k, 10l, 10m, 10n) comprising:
15 a text information notifying unit (21) for
16 notifying said second information terminal (40) of
17 the text information included in the e-mail message;
18 a sound information storing unit (23) adapted
19 to store sound information related to the e-mail
20 message; and
21 a managing unit (19) for managing association
22 between the e-mail message and the sound information
23 related to the e-mail message.

1 2. An e-mail system as set forth in claim 1, wherein
2 said managing apparatus (10a, 10b, 10c, 10d, 10e, 10f, 10g,
3 10h, 10i, 10j, 10k, 10l, 10m, 10n) further comprising:

4 a telephone number selecting unit (18) for selecting
5 a telephone number for use in handling the sound information
6 related to the e-mail message transmitted from said first
7 information terminal (70) to said second information terminal
8 (40);

9 a telephone number notifying unit (21) for notifying
10 said second information terminal (40) of the telephone number
11 selected by said telephone number selecting unit (18); and

12 a managing unit (19) for managing association among
13 the e-mail message, the telephone number, and the sound
14 information related to the e-mail message.

1 3. An e-mail system as set forth in claim 2, further
2 comprising:

3 a caller number obtaining unit (25) for obtaining a
4 telephone number of said second information terminal (40)
5 from which a telephone call is made to the telephone number
6 selected by said telephone number selecting unit (18);

7 a telephone number detecting unit (26) for detecting
8 whether or not a combination of the telephone number that
9 is selected by said telephone number selecting unit (18)
10 and the telephone number that is obtained by said caller
11 number obtaining unit (25) matches a pre-determined
12 combination; and

13 a selecting unit (27) for selecting, if the detection
14 result by said telephone number detecting unit (26) is
15 positive, the e-mail message as the one to which a reply
16 message is to be made.

1 4. An e-mail system as set forth in any one of claims
2 1 through 3,

3 wherein said second information terminal (40) includes
4 a reply sound input unit (41) for inputting sound information,
5 as a reply to the e-mail message, through an audio
6 communication line specified by the telephone number,

7 wherein, of said managing apparatus (10a, 10b, 10c,
8 10d, 10i, 10k, 10l), said sound information storing unit
9 (23) stores such sound information input from said reply
10 sound input unit (41) as sound information related to the
11 e-mail message, and

12 wherein said managing apparatus (10a, 10b, 10c, 10d,
13 10i, 10k, 10l) further comprises a reply information
14 notifying unit (21) for notifying said first information
15 terminal (70) of reply information that a reply in sound
16 information form has been obtained from said second
17 information terminal (40), based on the association managed
18 by said managing unit (19).

1 5. An e-mail system as set forth in claim 4, wherein
2 said reply information is a reply e-mail message.

1 6. An e-mail system as set forth in claim 5, wherein
2 said reply e-mail message has the sound information attached
3 thereto, which has been received from said second information
4 terminal (40) and then stored in said sound information
5 storing unit (23).

1 7. An e-mail system as set forth in claim 5, wherein
2 said reply e-mail message has a pointer for use in accessing
3 a section of said sound information storing unit (23) in
4 which section said sound information is stored.

1 8. An e-mail system as set forth in claim 4, wherein
2 said reply information is web data placed on the Internet.

1 9. An e-mail system as set forth in any one of claims
2 4 through 8, wherein, of said managing apparatus (10a, 10b,
3 10c, 10d, 10i, 10k, 10l),
4 said text information notifying unit (21) prepares
5 a notification e-mail message that contains the text
6 information to be notified to said second information
7 terminal (40);
8 said telephone number selecting unit (18) selects a
9 sound input phone number for use in inputting sound from
10 said second information terminal (40); and

11 said telephone number notifying unit (21) adds
12 information about the sound input phone number, which is
13 selected by said telephone number selecting unit (18), to
14 the notification e-mail message, which is prepared by said
15 text information notifying unit (21).

1 10. An e-mail system as set forth in any one of claims
2 4 through 8, wherein, of said managing apparatus (10a, 10b,
3 10c, 10d, 10i, 10k, 10l),

4 said text information notifying unit (21) prepares
5 notification web data to which said second information
6 terminal (40) is accessible, said notification web data
7 including at least the text information received from said
8 first information terminal (70);

9 said telephone number selecting unit (18) selects a
10 sound input phone number for use in inputting sound from
11 said second information terminal (40); and

12 said telephone number notifying unit (21) adds
13 information about the sound input phone number, which is
14 selected by said telephone number selecting unit (18), to
15 the notification web data, which is prepared by said text
16 information notifying unit (21).

1 11. An e-mail system as set forth in claim 10, further
2 comprising an access detecting unit (28) for detecting
3 whether or not access has been made by said second information
4 terminal (40) to the notification web data,

5 if the detection result by said access detecting unit
6 (28) is positive, said telephone number selecting unit (18)
7 selecting said sound input phone number.

1 12. An e-mail system as set forth in any one of claims
2 9 through 11, wherein said information about the sound input
3 phone number is said sound input phone number itself.

1 13. An e-mail system as set forth in any one of claims
2 9 through 11, wherein said information about the sound input
3 phone number is an address of a web page indicating the sound
4 input phone number thereon or a pointer for use in accessing
5 the web page.

1 14. An e-mail system as set forth in claim 1,
2 wherein, of said managing apparatus (10a, 10b, 10c,
3 10d, 10i, 10k, 10l), said text information notifying unit
4 (21) prepares notification web data to which said second
5 information terminal (40) is accessible, said notification
6 web data including at least the text information received
7 from said first information terminal (70), and
8 wherein said managing apparatus (10a, 10b, 10c, 10d,
9 10i, 10k, 10l) includes:
10 an access detecting unit (28) for detecting
11 whether or not access has been made by said second
12 information terminal (40) to the notification web data;
13 and

14 a calling unit (29) for calling said second
15 information terminal (40), if the detection result
16 by said access detecting unit (28) is positive.

1 15. An e-mail system as set forth in claim 14,
2 wherein said second information terminal (40) includes
3 a reply sound input unit (41) for inputting sound information,
4 as a reply to the e-mail message, through an audio
5 communication line specified by the telephone number,
6 wherein, of said managing apparatus (10a, 10b, 10c,
7 10d, 10i, 10k, 10l), said sound information storing unit
8 (23) stores such sound information input from said reply
9 sound input unit (41) as sound information related to the
10 e-mail message, and

11 wherein said managing apparatus (10a, 10b, 10c, 10d,
12 10i, 10k, 10l) further comprises a reply information
13 notifying unit (21) for notifying said first information
14 terminal (70) of reply information that a reply in sound
15 information form has been obtained from said second
16 information terminal (40), based on the association managed
17 by said managing unit (19).

1 16. An e-mail system as set forth in claim 15, wherein
2 said reply information is a reply e-mail message.

1 17. An e-mail system as set forth in claim 16, wherein
2 said reply e-mail message has the sound information attached

3 thereto, which has been received from said second information
4 terminal (40) and then stored in said sound information
5 storing unit (23).

1 18. An e-mail system as set forth in claim 16, wherein
2 said reply e-mail message has a pointer for use in accessing
3 a section of said sound information storing unit (23) in
4 which section said sound information is stored.

1 19. An e-mail system as set forth in claim 15, wherein
2 said reply information is web data placed on the Internet.

1 20. An e-mail system as set forth in claim 2, wherein,
2 if the e-mail message, transmitted from said first
3 information terminal (70) to said second information terminal
4 (40), has information added thereto about the sound
5 information, said managing apparatus (10a, 10b, 10c, 10d,
6 10i, 10k, 10l) further comprises:

7 a sound information obtaining unit (30) for obtaining
8 the sound information based on the information, added to
9 the e-mail message, about the sound information, said sound
10 information obtaining unit (30) then storing the thus
11 obtained sound information, as the sound information related
12 to the e-mail message, to said sound information storing
13 unit (23);

14 a sound information reproducing unit (31) for
15 reproducing the sound information stored in said sound

16 information storing unit (23); and
17 a sound replay unit (42) for replaying the sound
18 information, reproduced by said sound information
19 reproducing unit (31), through said telephone number.
20

1 21. An e-mail system as set forth in claim 20, further
2 comprising:
3 a caller number obtaining unit (25) for obtaining a
4 telephone number of said second information terminal (40)
5 from which a telephone call is made to the telephone number
6 selected by said telephone number selecting unit (18);
7 a telephone number detecting unit (26) for detecting
8 whether or not a combination of the telephone number that
9 is selected by said telephone number selecting unit (18)
10 and the telephone number that is obtained by said caller
11 number obtaining unit (25) matches a pre-determined
12 combination; and
13 a selecting unit (27) for selecting, if the detection
14 result by said telephone number detecting unit (26) is
15 positive, the sound information as that which is to be
16 reproduced by said sound information reproducing unit (31).

1 22. An e-mail system as set forth in claim 20 or claim
2 21, wherein said managing apparatus (10e, 10f, 10g, 10h,
3 10j, 10m, 10n) prepares, based on the association managed
4 by said managing unit (19), reproduction information, as

5 a reproduction information notification e-mail message, that
6 an e-mail message which is addressed to said second
7 information terminal (40), and to which information about
8 sound information is added, has been received from said first
9 information terminal (70).

1 23. An e-mail system as set forth in claim 22, wherein
2 said reproduction information notification e-mail message
3 includes said telephone number selected by said telephone
4 number selecting unit (18).

1 24. An e-mail system as set forth in claim 22, wherein
2 said reproduction information notification e-mail message
3 has a pointer for use in accessing information indicating
4 said telephone number selected by said telephone number
5 selecting unit (18).

1 25. An e-mail system as set forth in claim 21, wherein
2 said managing apparatus (10e, 10f, 10g, 10h, 10j, 10m, 10n)
3 prepares, based on the association managed by said managing
4 unit (19), reproduction information, in the form of web data
5 placed on the Internet, that an e-mail message which is
6 addressed to said second information terminal (40), and to
7 which information about sound information is added, has been
8 received from said first information terminal (70).

1 26. An e-mail system as set forth in any one of claims

2 21 through 25, wherein, of said managing apparatus (10e,
3 10f, 10g, 10h, 10j, 10m, 10n),

4 said text information notifying unit (21) prepares
5 a notification e-mail message that contains the text
6 information to be notified to said second information
7 terminal (40);

8 said telephone number selecting unit (18) selects a
9 sound reproduction phone number for use in reproducing sound
10 on said second information terminal (40); and

11 said telephone number notifying unit (21) adds
12 information about the sound reproduction phone number, which
13 is selected by said telephone number selecting unit (18),
14 to the notification e-mail message, which is prepared by
15 said text information notifying unit (21).

1 27. An e-mail system as set forth in any one of claims
2 21 through 25, wherein, of said managing apparatus (10e,
3 10f, 10g, 10h, 10j, 10m, 10n),

4 said text information notifying unit (21) prepares
5 notification web data to which said second information
6 terminal (40) is accessible, said notification web data
7 including at least the text information received from said
8 first information terminal (70);

9 said telephone number selecting unit (18) selects a
10 sound reproduction phone number for use in reproducing sound
11 on said second information terminal (40); and

12 said telephone number notifying unit (21) adds

13 information about the sound reproduction phone number, which
14 is selected by said telephone number selecting unit (18),
15 to the notification web data, which is prepared by said text
16 information notifying unit (21).

1 28. An e-mail system as set forth in claim 27, further
2 comprising an access detecting unit (28) for detecting
3 whether or not access has been made by said second information
4 terminal (40) to the notification web data,
5 if the detection result by said access detecting unit
6 (28) is positive, said telephone number selecting unit (18)
7 selecting said sound reproduction phone number, and
8 said sound information reproducing unit (31)
9 reproducing the sound information to said second information
10 terminal (40) which is connected to said sound reproduction
11 phone number through sound communication.

1 29. An e-mail system as set forth in any one of claims
2 26 through 28, wherein said information about the sound
3 reproduction phone number is the sound reproduction phone
4 number itself.

1 30. An e-mail system as set forth in any one of claims
2 26 through 28, wherein said information about the sound
3 reproduction phone number is an address of a web page
4 indicating the sound reproduction phone number thereon or
5 a pointer for use in accessing the web page.

1 31. An e-mail system as set forth in claim 14 or claim
2 15, wherein, if the e-mail message, transmitted from said
3 first information terminal (70) to said second information
4 terminal (40), has information added thereto about the sound
5 information, said managing apparatus (10e, 10f, 10g, 10h,
6 10j, 10m, 10n) further comprises:
7 a sound information obtaining unit (30) for obtaining
8 the sound information based on the information, added to
9 the e-mail message, about the sound information, said sound
10 information obtaining unit (30) then storing the thus
11 obtained sound information, as the sound information related
12 to the e-mail message, to said sound information storing
13 unit (23);
14 a sound information reproducing unit (31) for
15 reproducing the sound information stored in said sound
16 information storing unit (23); and
17 a sound replay unit (42) for replaying the sound
18 information, reproduced by said sound information
19 reproducing unit (31), through an audio communication channel
20 established by a telephone call made by said calling unit
21 (29).

1 32. An e-mail system as set forth in claim 31, wherein
2 said managing apparatus (10e, 10f, 10g, 10h, 10j, 10m, 10n)
3 prepares, based on the association managed by said managing
4 unit (19), reproduction information, as a reproduction

5 information notification e-mail message, that an e-mail
6 message which is addressed to said second information
7 terminal (40), and to which information about sound
8 information is added, has been received from said first
9 information terminal (70).

1 33. An e-mail system as set forth in claim 32, wherein
2 said reproduction information notification e-mail message
3 has a pointer for use in accessing said notification web
4 data.

1 34. An e-mail system as set forth in claim 31, wherein
2 said managing apparatus (10e, 10f, 10g, 10h, 10j, 10m, 10n)
3 prepares, based on the association managed by said managing
4 unit (19), reproduction information, in the form of
5 reproduction information notification web data placed on
6 the Internet, that an e-mail message which is addressed to
7 said second information terminal (40), and to which
8 information about sound information is added, has been
9 received from said first information terminal (70).

1 35. An e-mail system as set forth in any one of claims
2 1 through 34, further comprising an identification
3 information setting unit (32) for providing, if there are
4 a plurality of such e-mail messages or if there are a plurality
5 of such sound information items related to the individual
6 e-mail messages, the individual e-mail messages or the

7 individual sound information items with identification
8 information for identifying the e-mail messages or the sound
9 information items,
10 said managing unit (19) managing association among
11 the e-mail messages and the sound information items related
12 to the e-mail messages and the identification information
13 provided by said identification information setting unit
14 (32).

1 36. An e-mail system as set forth in claim 35, further
2 comprising an identification information inputting unit (43)
3 for inputting such identification information so as to
4 specify the e-mail message or the e-mail-related sound
5 information corresponding to the input identification
6 information.

1 37. An e-mail system as set forth in any one of claims
2 1 through 36, further comprising a sound guidance unit (24)
3 for providing a user of said second information terminal
4 (40) with guidance by voice.

1 38. An e-mail system as set forth in any one of claims
2 1 through 37, further comprising a web guidance unit (13)
3 for providing a user of said first information terminal (70)
4 or a user of said second information terminal (40) with a
5 web page that shows guidance thereon.

1 39. A method for transmitting electronic mail
2 (e-mail) message that includes at least text information
3 to be transmitted and received between a first information
4 terminal (70) and a second information terminal (40), which
5 first information terminal transmits and receives sound
6 information and text information, and which second
7 information terminal (40) transmits and receives sound
8 information and text information in different ways,
9 said method comprising the steps of:
10 notifying said second information terminal (40)
11 of the text information included in the e-mail message;
12 storing sound information related to the e-mail
13 message; and
14 managing association between the e-mail message
15 and the sound information related to the e-mail message.

1 40. An information processing apparatus,
2 communicably interconnected between a first information
3 terminal (70) for transmitting and receiving sound
4 information and text information and a second information
5 terminal (40) for transmitting and receiving sound
6 information and text information in different ways, for
7 managing an electronic mail (e-mail) message, including at
8 least text information, transmitted and received between
9 said first information terminal (70) and said second
10 information terminal (40), said information processing
11 apparatus comprising:

12 a text information notifying unit (21) for notifying
13 said second information terminal (40) of the text information
14 included in the e-mail message;

15 a sound information storing unit (23) adapted to store
16 sound information related to the e-mail message; and

17 a managing unit (19) for managing association between
18 the e-mail message and the sound information related to the
19 e-mail message.

1 41. An electronic mail (e-mail) managing program
2 which instructs a computer to function as an information
3 processing apparatus, communicably interconnected between
4 a first information terminal (70) for transmitting and
5 receiving sound information and text information and a second
6 information terminal (40) for transmitting and receiving
7 sound information and text information in different ways,
8 for managing an e-mail message, including at least text
9 information, transmitted and received between said first
10 information terminal (70) and said second information
11 terminal (40), said information processing apparatus
12 comprising:

13 a text information notifying unit (21) for notifying
14 said second information terminal (40) of the text information
15 included in the e-mail message;

16 a sound information storing unit (23) adapted to store
17 sound information related to the e-mail message; and

18 a managing unit (19) for managing association between

19 the e-mail message and the sound information related to the
20 e-mail message.

1 42. A computer-readable recording medium storing an
2 electronic mail (e-mail) managing program thereon, which
3 program instructs a computer to function as an information
4 processing apparatus, communicably interconnected between
5 a first information terminal (70) for transmitting and
6 receiving sound information and text information and a second
7 information terminal (40) for transmitting and receiving
8 sound information and text information in different ways,
9 for managing an e-mail message, including at least text
10 information, transmitted and received between said first
11 information terminal (70) and said second information
12 terminal (40), said information processing apparatus
13 comprising:

14 a text information notifying unit (21) for notifying
15 said second information terminal (40) of the text information
16 included in the e-mail message;

17 a sound information storing unit (23) adapted to store
18 sound information related to the e-mail message; and

19 a managing unit (19) for managing association between
20 the e-mail message and the sound information related to the
21 e-mail message.